



**MINUTES OF 70<sup>th</sup> MEETING OF THE RESEARCH COUNCIL (RC) OF CSB-CTR TI,  
RANCHI HELD ON 11 JUNE, 2024**

The 70<sup>th</sup> meeting of Research Council (RC) of Central Tasar Research and Training Institute was held on 11<sup>st</sup> June, 2024 at the Institute under the Chairmanship of Dr. N.B. Chowdary, Director, CSB-CTR TI, Ranchi to evaluate the new project/pilot study proposals and to review the ongoing & concluded projects, TOTs, CBT and ECP programmes. List of the participants is appended as Annexure-1.

At the onset the Chairman, RC welcomed all the scientists and requested them to be crisp and to the point in their presentations. Later the meeting proceeded as per the agenda by Dr. Jitendra Singh, Scientist-D, PMCE Division.

**Agenda No.1: Confirmation of the previous RC Meeting Minutes**

The Minutes of 69<sup>th</sup> R.C. meeting was circulated to the Scientists *vide* Email dated 30.03.2024. Since no comments / suggestions have been received so far, the Minutes may be confirmed.

**Agenda No. 2: Review of Action Taken of the recommendation / decisions of the previous RC meeting**

Follow up action taken on the decisions made during the previous RC & RAC meetings were reviewed by the Director and following observations were made.

**Concluded Pilot Studies**

1. [CYR 04013 MI] Studies on storage practices of tropical tasar cocoons for better cooking efficiency, reeling parameters and yarn quality. (February 2022- January 2024)

Chairman suggested PI to submit the concluded report in RMIS 10 within stipulated time.

[**Action:** Mr. Ashu Kumar, Scientist-B & PI]

2. [BPC 04008 EF] Mass level extraction of sericin from tasar cocoon cooking waste water for its prospective utilization [PI: Dr. K. Jena] (March 2021- February 2024) (DBT Funded)

Chairman suggested PI to publish research paper in high Impact journal and also commercialize the developed technology timely.

[**Action:** Dr. K. Jena, Scientist-D & PI]

3. [MOE 04007 EF] Establishment of Biotech-KISAN Hub at Professional Assistance for Development Action (PRADAN), Deoghar, Jharkhand for three Aspirational Districts of Jharkhand (Godda, Dumka and Pakur) (March 2021- March 2024) Collaborative Project with PRADAN

Chairman suggested PI to publish research paper in high Impact journal and also suggested to submit the concluded report in RMIS 10 within stipulated time.

[**Action:** Dr. J.P Pandey Scientist-D & PI]

[MOE 04014 MI] Evaluation and popularization of improved technologies developed in the field of tasar sector for central and north India (On Station/Farmer Trials of CTRTI) [February 2022- March 2024)

Chairman suggested PI to publish research paper in NASS rating journal and also suggested to submit the concluded report in RMIS 10 within stipulated time.

[**Action:** Dr. Jagadajyoti Binkadakatti, Scientist-C & PI]

### **AGENDA No. 3: Evaluation of New Research Proposals**

- 1. Elucidating effects of Tasar silkworm feeding on Phyllosphere microbiome and biochemical profile of foliage of *Terminalia sp.*** [PI: Dr. Aparna K., Scientist-C]

Committee suggested PI to submit the revised project proposal to DBT within month for funding.

[**Action:** Dr. Aparna Kopparapu, Scientist-C & PI]

- 2. Study on utilizing scanner technique for identification of uzifly/yellow fly infested seed cocoon** [PI: Dr. H.S. Gadad, Scientist-C]

Committee suggested PI to kept proposal on hold.

[**Action:** Dr. H.S. Gadad, Scientist-C & PI]

- 3. Assessment of suitable microenvironment in grainage and rearing field for enhancement of tasar cocoon production under climate change and its scenario** [PI: Dr. Jitendra Singh, Scientist-C]

Committee suggested PI to kept proposal on hold.

[**Action:** Dr. Jitendra Singh, Scientist-C & PI]

- 4. Maintenance of tasar food plant germplasm in Gene bank of CTRTI, Ranchi** [PI: Mr. Haragopal Dutta. Scientist-B]

Committee suggested PI to submit proposal for funding.

[**Action:** Mr. Haragopal Dutta. Scientist-B &PI]

- 6. Development of Tasar food plants plantation on National Highways on the sides of carriageways in Jharkhand** [PI: Mr. Haragopal Dutta. Scientist-B]

Committee suggested PI to submit proposal for funding.

[**Action:** Mr. Haragopal Dutta. Scientist-B & PI]

### **Agenda No. 3: New concept notes for approval**

Total projects (3) and pilot study (4) proposals were evaluated and following decisions were made during the meeting:

- 1. Studies on standardizing techniques for preservation of Diapausing nucleus Seed cocoons and Egg production in basic seed grainage.**

Dr. H.Gadad, Scientist-C presented the project proposal, committee suggested PI to revise the title of the project, duration of the study need to revise with justification. Revised project proposal submit to the PMCE division by 15.07.2024 for further action.

[**Action:** K. S. Prakash, Scientist-D, BSMTC R.C Varam, AP]

**2. Design & Development of Conveyor Belt for Tasar Silkworm Pebrine Identification System.**

Smt. Susmita Das, Scientist-D presented the project proposal, committee suggested PI to revise the title of the project. Revised project proposal submit to the PMCE division by 15.07.2024 for further action.

[**Action:** Smt. Susmita Das., Scientist-D]

**3. Development of a counting machine for tasar cocoons.**

Smt. Susmita Das, Scientist-D presented the project proposal, committee suggested PI to revise the title of the project. Revised project proposal submit to the PMCE division by 15.07.2024 for further action.

[**Action:** Smt. Susmita Das., Scientist-D]

**4. Identification and molecular characterization major diseases associated with Tasar host plants and the validation of effective management strategy**

Dr. Shreenath Y S., Scientist-B presented the project proposal, committee suggested PI to revise the objectives and title of the project with deletion of ‘validation of effective management strategy’. Chairman also suggested PI to revise the review of literature. Revised project proposal submit to the PMCE division in by 15.07.2024 for further action.

[**Action:** Dr. Shreenath Y S., Scientist-B]

**5. Constraints analysis of low Tasar production**

Dr. Jagadajyothi Binkdakatti., Scientist-D presented the project proposal, committee suggested PI to revise the objectives and title of the project. Chairman also suggested PI to revise sampling frame and methodology with inclusion of DoS headquarters. Revised project proposal submit to the PMCE division in RMIS01 by 30.06.2024 for further action.

[**Action:** Dr. Jagadajyothi Binkdakatti ., Scientist-D]

**6. Exploring the Feasibility of Rearing of Tasar Silkworm on Lac Food Plants: Implications for Sustainable Silk Production**

Dr. K. Jena., Scientist-D presented the project proposal, committee suggested PI to revise the title and objectives of the project. Revised project proposal submit to the PMCE division by 15.07.2024 for further action.

[**Action :** Dr. K.Jena., Scientist-D]

**7. Eco Friendly Bioplastic Production Using Tasar Silk Eggshell: A Sustainable Approach**

Dr. K. Jena., Scientist-D presented the project proposal, committee suggested PI to revise the title and objectives of the project. Revised project proposal submit to the PMCE

division by 15.07.2024 for further action.

[**Action** : Dr. K.Jena., Scientist-D]

#### **8. Possibilities of Indoor Rearing in Tropical Tasar Silkworm (*Antheraea mylitta*)**

Dr. Divya Rajawat Scientist-B presented the project proposal, committee suggested PI to submit project proposal to the PMCE division by 110.07.2024 for further action.

[**Action** : Dr. Divya Rajawat Scientist-B]

#### **Agenda No. 4: Review on concluded projects Concluded Project ( as PI)**

**Nil**

#### **Agenda No. 5: Progress of Ongoing projects**

1. [PIB 04009 SI] Evaluation of identified hybrids of *Terminalia arjuna* x *T. tomentosa* and drought tolerant *T. arjuna* for their suitability in different tropical tasar silkworm rearing regions. (October 2021 - September 2026)

Dr. Aparna Kopparapu, Scientist-C presented the progress and committee suggested PI to ensure progress of the project as per mile stone.

[**Action:** Dr. Aparna Kopparapu, Scientist-C & PI]

2. [PPA 04010 CN] Region and season specific selection of pruning and brushing schedule for tasar food plants and silkworm protection. (February 2022- January 2025)

Dr. Jitendra Singh, Scientist-D presented the progress and committee suggested PI to ensure progress of the project as per mile stone.

[**Action:** Dr. Jitendra Singh, Scientist-D & PI]

3. [ARP 04012 SI] Developing ectomycorrhizal bio-inoculants for improving survival and leaf yield of *Terminalia arjuna* and *T. tomentosa*. (Feb. 2022- Jan.2026)

Dr. Aparna Kopparapu, Scientist-C presented the progress and committee suggested PI to ensure progress of the project as per mile stone.

[**Action:** Dr. Aparna K., Scientist-C & PI]

4. [SIP 04022 SIC] Impact of weather change on tasar food plants and silkworm (March, 2024 – February, 2027).

Dr. Jitendra Singh, Scientist-D presented the progress and committee took note the progress and committee took note the progress.

[**Action:** Dr. Jitendra Singh, Scientist-D & PI]

5. [PPA 04023 SIC] Identification of suitable package of practices for establishment of *Lagerstroemia speciosa* (Jarul) for quality leaf production (March, 2024 – February, 2029).

Smt. Susmita Das, Scientist-D presented the progress and committee took note the progress and committee took note the progress.

[**Action:** Smt. Susmita Das, Scientist-D]

6. [PPA 04024SIC] Effect of different plant spacing and pruning heights on chawki leaf productivity of tasar host plants (*Terminalia arjuna*, *T. Tomentosa* and *Lagerstroemia speciosa*) and chawki silkworm rearing. (March 2024 – February, 2027)

Dr. Harendra Yadav, Scientist-C presented the progress and committee took note the progress and committee took note the progress.

[Action: Dr. Harendra Yadav, Scientist-C]

7. [AIE 04004 CN] Study on existence of tropical tasar silkworm eco-races and their subsist places with the help of geospatial technology. (March, 2020- February 2023)

Dr. D.I.G. Prabhu, Scientist-C presented the progress and committee took note the progress.

[Action: Dr. D.I. G. Prabhu, Scientist-C & PI]

8. [ARE 04011 MI] Diversity, yield loss and management of predatory wasps attacking *Antheraea mylitta* Drury [February 2022- January 2025)

Dr. H.S. Gadad, Scientist-C presented the progress of ongoing project and committee took note the progress.

[Action: Dr. H. S. Gadad, Scientist-C & PI]

9. [APR 04015CN] Documentation and Validation of Indigenous Technical Knowledge (ITKs) inn Tropical tasar Zone (December-2022 to November-2025)

Dr. H.S. Gadad, Scientist-C project presented the progress and committee took note the progress.

[Action: Dr. H. S. Gadad, Scientist-C & PI]

10. [ARP04016M1] **Tasar Silkworm Disease Monitoring and Management** (March, 2023-Feb, 2028)

Dr. J.P. Pandey Scientist-D, project presented the progress and committee took note the progress.

[Action: Dr. J.P. Pandey Scientist-D, Scientist-C & PI]

11. [A1B04017MI] **Recurrent Selection and Multiplication of Thermo-Tolerant Line(s) of Tropical Tasar Silkworm** (March, 2023-Feb, 2026)

Dr. D.I.G. Prabhu, Scientist-D presented the progress of project and committee suggested PI to ensure project running as per milestone.

[Action: Dr. I. G. Prabhu. Scientist-D & PI]

12. [AIB 04018 MI]: **In situ Conservation of Modal Ecorace of Tasar Silkworm in Odisha** (March, 2023-Dec, 2027)

Dr. D.I.G. Prabhu, Scientist-C presented the progress of project and committee suggested PI to talk immediate action for signing of MOA with collaborative Institute/ organization and be ensure project running as per milestone.

[Action: Dr. I. G. Prabhu, Scientist-D & PI]

13. [AIB 04019 MI]: **In situ Conservation of Raily Ecorace of Tasar Silkworm in Chhattisgarh** (March, 2023-Dec,2027)

Dr. H.S. Gadad, Scientist-C presented the progress of project and committee suggested PI to talk immediate action for signing of MOA with collaborative Institute/ organization and be ensure project running as per milestone.

[Action: Dr. H.S. Gadad, Scientist-C & PI]

**14. [AIB 04020 MI]:** In situ Conservation of Sarihan Ecorace of Tasar Silkworm in Jharkhand (March, 2023-Dec,2027)

Dr. H.S. Gadad, Scientist-C presented the progress of project and committee suggested PI to talk immediate action for signing of MOA with collaborative Institute/ organization and be ensure project running as per milestone.

[Action: Dr. S. Giri, Scientist-D. RSRS, Dumka & PI]

**15. [CEM 04021 MNC]:** Evaluation of technologies and machines developed in tasar post cocoon technology (March 2024 – February, 2026).

Shri Ashu Kumar, Scientist-B presented the progress and committee took note of the progress.

[Action: Shri Ashu Kumar, Scientist-B & PI]

**16. [BPC 04025 SNC]** Management of type II diabetic (T2D) condition through tasar sericin (March 2024 – September, 2026). (PI: Dr. K.Jena, Scientist-D)

P.I. presented the progress and committee took note of the progress.

[Action: Dr. K. Jena, Scientist-D & PI]

**17. [BPS 04026 SNC]** Studies on nutraceutical properties of silkworm pupae oil and development of a low-cost combination of vanya and mulberry pupae meal based feed for carp broodstock, and cultivable aquatic species (March 2024 – February, 2026). (PI: Dr. K. Jena, Scientist-D)

P.I. presented the progress and committee took note of the progress.

[Action: Dr. K.Jena, Scientist-D & PI]

**18. [SRP08012MNC]** Development of a Rapid Antigen Test Kit for Diagnosis of Cytoplasmic Polyhedrosis in Vanay Silkworms (*Antheraea assamensis*, *A. mylitta* and *A. proylei*) (Collaboration with SBRL) (February 2024- January 2026)

Dr. H.S. Gadad, Scientist-C presented the progress committee took note of the progress.

[Action: Dr. H.S. Gadad, Scientist-C & PI]

## **AGENDA NO. 6: PROGRESS OF PILOT STUDIES/ PROGRAMME OF WORK**

Respective PIs presented the progress of pilot study and Program of work. Committee took note of the progress.

### **A. Ongoing Pilot Studies**

[CTR&TI/HPI/PS-30] Comparative efficacy of nutrient formulations for improvement of leaf yield & quality of tasar host plantation.

PI presented the progress of pilot study & the committee took note of the progress.

[Action: Ms. Susmita Das, Scientist-D & PI]

[CTR&TI/FMA/PS-36] Characterization and evaluation of propagation traits, floral biology, morphological, biochemical and reproductive parameters in the identified improved accessions of *Terminalia arjuna*.

PI presented the progress of pilot study & the committee took note of the progress.

[Action: Dr. Shreenath Y.S, Scientist-B]

[CTR&TI/FMA/PS/35] Isolation and characterization of culturable bacterial communities associated with salivary glands of *Forcipomyia* spp. an ectoparasite on *Antheraea mylitta*.

Dr. H. Gadad, Scientist-C presented the progress of pilot study & the committee took note of the progress.

[Action: Dr. S.M Majumder, Scientist-C]

[CTR&TI/PCT/PS32] Modification of existing softening technique followed for peduncle for better yarn quality

PI presented the progress of pilot study & the committee took note of the progress.

[Action: Mr. Ashu Kumar, Scientist-B]

[CTR&TI/PCT/PS33] Development of alternative ways of producing Ghicha tasar yarn

PI presented the progress of pilot study & the committee took note of the progress.

[Action: Mr. Ashu Kumar, Scientist-B]

### **B. On-going Programme of Work (of continuous nature)**

Respective PIs presented the progress of Programme of Work.

[CTR&TI/HPP/POW-02] Farm Management & Developmental works

[PI: Dr. H. Yadav, Scientist-C]

[CTR&TUSWPT/POW-09] Laboratory production and supply of LSM

[PI: J. P. Pandey, Scientist-D]

**AGENDA NO. 7: TRIAL OF TECHNOLOGIES (OSTs/ OFTs)**

Dr. Jagadajyoti Binkadakatti, Scientist-D, presented the progress of TOTs. Committee took note of the progress.

[Action: Dr. Jagadajyoti Binkadakatti, Scientist-D]

**AGENDA NO. 8: EXTENSION (ECP) AND OTHER PROGRAMMES**

Dr. Jagadajyoti Binkadakatti, Scientist-D presented the progress of ECPs. The council took note of the progress.

[Action: Dr. Jagadajyoti Binkadakatti, Scientist-D]

**AGENDA NO. 9: TRAINING (CBT) AND OTHER PROGRAMMES**

Dr. Jagadajyoti Binkadakatti, Scientist-D presented the progress of CBT. The council took note of the progress.

[Action: Dr. Vishal Mittal, Scientist-D& P1]

**AGENDA NO. 10: DISCUSSION ON GENERAL COMMENTS/SUGGESTIONS OF RC/ RAC**

Chairman suggested to all the PIs of ongoing projects for maintained register for physical and financial progress of the ongoing projects as per mile stone mentioned in approved project.

**AGENDA NO. 11: ANY OTHER POINT WITH PERMISSION OF THE CHAIR**

The meeting ended with a vote of thanks to the chair.

Place: Ranchi

Date: 20.06. 2024



Dr. N. B. Chowdary

DIRECTOR



**LIST OF PARTICIPANTS ATTENDED 69th MEETING OF THE RESEARCH COUNCIL (RC) OF CTR&TI RANCHI HELD ON 30<sup>th</sup> March 2024**

1. Dr. N. B. Chowdary, Director, CTR&TI, Ranchi
2. Ms. Susmita Das, Scientist-D, CTR&TI, Ranchi
3. Dr. J. P Pandey, Scientist-D, CTR&TI, Ranchi
4. Dr. K. Jena, Scientist-D, CTR&TI, Ranchi
5. Dr. D.I.G. Prabhu, Scientist-D, CTR&TI, Ranchi
6. Dr. Jitendra Singh, Scientist - D, CTR&TI, Ranchi
7. Dr. Dr. Jagadajyoti B., Scientist-D, CTR&TI, Ranchi
8. Dr. Harendra Yadav, Scientist-C, CTR&TI, Ranchi
9. Dr. H.S. Gadad, Scientist-C, CTR&TI, Ranchi
10. Dr. Aparna K., Scientist-C, CTR&TI, Ranchi
11. Mr. Ashu Kumar, Scientist-B, CTR&TI, Ranchi
12. Mr. Haragopal Dutta, Scientist-B, CTR&TI, Ranchi
13. Dr. Arnab Roy, Scientist-B, CTR&TI, Ranchi
14. Dr. Sruthy K S, Scientist-B, CTR&TI, Ranchi
15. Dr. Nidhi Sukhija, Scientist-B, CTR&TI, Ranchi
16. Mrs. Divya Rajawat, Scientist-B, CTR&TI, Ranchi
17. Dr. Shreenath Y S, Scientist-B, CTR&TI, Ranchi